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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,559	03/02/2001	Reinhard Plaszka	JEK/PILASCHKA	3460

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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/719,559

Applicant(s)

PLASCHKA ET AL.

Examiner

Lawrence D Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18, 19 and 21-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18, 19 and 21-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed April 14, 2004.

Claim 18 was amended rendering claims 18-19 and 21-45 pending.

Claim Rejections – 35 USC § 103(a)

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18-19, 21, 23, 26-28 and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Henbo et al. (U.S. 5,871,833).

Henbo discloses a security paper comprising a support layer and coating layer (column 2, lines 26-28) where the coating layer includes acrylates and a mixture of acrylate and non-acrylate copolymers (column 5, lines 4-24). The coating layer lacks polyurethane and a filler substance. Henbo discloses forgery preventive (security paper) is clearly recognized when held up to a light (visually detectable) (column 13 lines 8-15). The reference discloses the use of pigments (column 5, lines 25-40) and Figure 2 shows the coating provided on the paper only in predetermined areas. In instant claim

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18, the phrase, "a paper layer useful for producing documents of value" is directed to intended use. A recitation of the intended use of the claimed

invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Although Henbo does not explicitly disclose a dirt repellant surface, because the coating is positioned over a layer of the security paper, the coating keeps dirt from forming on paper. Henbo does not show that the security paper has a coating weight as in instant claim 19. However, such coating weight is a property which can be easily determined by one of ordinary skill in the art. With regard to the limitation of the coating weight, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. coating weight) fails to render claims patentable in the absence of unexpected results. The coating weight is optimizable as it directly affects the durability and mechanical strength of the security paper. As such, it is optimizable. It would have been obvious to one of ordinary skill in the art to make the security paper with the limitations of the coating weight since it has been held that

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discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215 (CCPA 1980).

Claim Rejections – 35 USC § 103(a)

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 22, 24-25 and 38-40 rejected under 35 U.S.C. 103(a) as being unpatentable over Henbo et al. (U.S. 5,871,833) in view of Melling et al. (U.S. 4,943,093).

Henbo is relied on for claims 18-19, 21, 23, 26-28 and 35 as indicated above. Henbo discloses a print pattern is formed between the support layer and coating layer for forgery prevention (column 5, lines 47-59) However, Henbo does not disclose luminescent properties, the paper comprising cotton or plastic fibers. Melling teaches a security paper having a coating (column 1, line 61 through column 2, line 60) having fluorescent material (luminescent) having pigmented coloring materials which can transmit or reflect light (column 2, lines 41-50 and column 5, lines 30-36). Melling further teaches a plastic substrate (column 2, line 55 and column 7, line 20) where the layers

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are formed of fiber (column 9, lines 19-25) where the fiber can be cotton (column 11, lines 9-20). In instant claim 40, the paper being receptive to printing constitutes a 'capable of' limitation and that such a recitation that an element is 'capable of' performing a function is not a positive limitation but only requires the ability to so perform. Henbo and Melling are analogous art because they are from the same field of security documents. It would have been obvious to one of ordinary skill in the art to include the security paper of Henbo comprising cotton and plastic fibers and having luminescent properties because Melling teaches the use of these fibers so only the highlight regions of the fibers are observed in transmitted light, improving the security features of the paper (column 10, lines 1-10).

Claim Rejections – 35 USC § 103(a)

6. Claim 29-34 and 36-45 rejected under 35 U.S.C. 103(a) as being unpatentable over Kaule (U.S. 5,817,205) in view of Henbo et al. (U.S. 5,871,833).

Kaule teaches making a security paper (column 3, lines 44-45 and column 6, lines 13-36) by applying a coat to the paper surface (column 5, lines 1-3) along with lacquers and printed protective layers (column 5, lines 59-65). Kaule teaches the paper comprising paper fibers (column 7, line 67) where the surface is suitable for producing isolated coated areas (column 8, lines 29-31). The reference discloses a paper machine cutting the paper to a desired size (column 9, lines 11-24). The coating of Kaule lacks both polyurethane and a filler substance. In claims 29, 30 and 38, the phrase, 'surface coating for improving durability of the paper layer' is directed to intended use. A

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recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Additionally, in instant claim 38, the phrase, 'forming a surface dirt repellant film on the fibers of the paper' is directed to a product by process claim limitation, which is given little patentable weight in product claims. Although Kaule does not explicitly disclose a dirt repellant surface, it would have been obvious to one of ordinary skill in the art that the coating of Kaule repels dirt because the coating is provided with lacquers and printed protective layers (column 5, lines 59-65) which helps keep the security paper free from dirt. Kaule does not specifically disclose the coating layer comprising acrylates.

Henbo discloses a security paper comprising a support layer and coating layer (column 2, lines 26-28) where the coating layer includes acrylates and a mixture of acrylate and non-acrylate copolymers (column 5, lines 4-24).

Kaule and Henbo are analogous art because they are from the same field of security documents. It would have been obvious to one of ordinary skill in the art to include acrylates in the security document of Kaule because the acrylate material improves the binding properties of the coating layer.

Response to Arguments

7. Arguments made in regards to rejection made under 35 USC 103(a) as being unpatentable over Henbo et al. (U.S. 5,871,833) have been considered but are unpersuasive. Applicant argues the engraving coating layer of Henbo does not cover at least one surface of the support layer as in instant claim 18. Examiner respectfully disagrees because Figure 1 shows the coating layer covering at least one surface of the support layer. Applicant further argues the coating of Henbo comprises fillers in the form of fine inorganic powder, such as titanium dioxide. Henbo discloses the inorganic powder includes binder pigments which function as an adhesive (column 5, lines 30-35). Applicant states polyurethane is preferred in Henbo. Applicant seeks to limit the scope of Henbo, which discloses the examples are non-limiting and further discloses the binder resin may preferably include polyester instead of polyurethane (column 5, lines 15-24). Applicant argues Henbo does not focus on the problem of improving durability of security papers or documents of value, which is an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Arguments made in regards to rejection made under 35 USC 103(a) as being unpatentable over Henbo et al. (U.S. 5,871,833) in view of Melling et al. (U.S. 4,943,093) have been considered but are unpersuasive. Applicant argues Melling fails to make up for the shortcomings of Henbo et al. Because Henbo has been maintained for reasons of record, Melling is also maintained. In response to applicant's argument that Melling does not disclose the security paper itself provided with a coating, Melling teaches a coated security paper (column 1, lines 60-68 and column 2, lines 58-65).

Arguments made in regards to rejection made under 35 USC 103(a) as being unpatentable over Kaule (U.S. 5,817,205) in view of Henbo et al. (U.S. 5,871,833) have been considered but are unpersuasive. Applicant argues Kaule fails to disclose documents of value or security paper. Kaule discloses a security paper in column 6, lines 14-36. Applicant argues Kaule does not disclose a dirt repellant surface coating. Examiner respectfully disagrees because Kaule teaches coating a paper surface in column 5, lines 1-3, where is obvious to one skilled in the art that a coating on a paper surface repels dirt. Applicant argues the absence of a filler and polyurethane does not render the coating of Kaule obvious. Because the coating of Kaule lacks a filler and polyurethane, the limitation of claim 18 stating "comprises a non-polyurethane composition lacking a filler substance" is met.

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8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and After Final communications. Any inquiry of a general nature or relating to the status of this

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application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson
Examiner
Art Unit 1774

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

